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ABSTRACT

This booklet explores the idea of quality and its management as it applies to providers of education in particular, but also as it applies to national standards bodies and workplaces offering on-the-job training. It explores the focus on quality in industry and education and defines quality in terms of the features of quality and their application. The booklet shows how the partnerships that are central to quality management systems enable responsibilities for quality to be delegated. Three models that demonstrate different approaches to quality management are illustrated: International Standards Organization (ISO) 9000, Total Quality Management, and the combined approach. The booklet then describes the activities that ensure quality: establishing, maintaining, and reviewing standards; self-evaluation; and quality audit. Other topics include differences between systems and the reasons for these differences and interaction of partners in quality management. Various accreditation methods are discussed: unit accreditation, accreditation for a combination of units, group accreditation, and general accreditation. The booklet ends with a list of the goals of quality management. The booklet is written primarily in terms of New Zealand's National Certificate and National Diploma, but the principles it presents apply across all qualifications. Contains 19 references and a glossary. (YLB)

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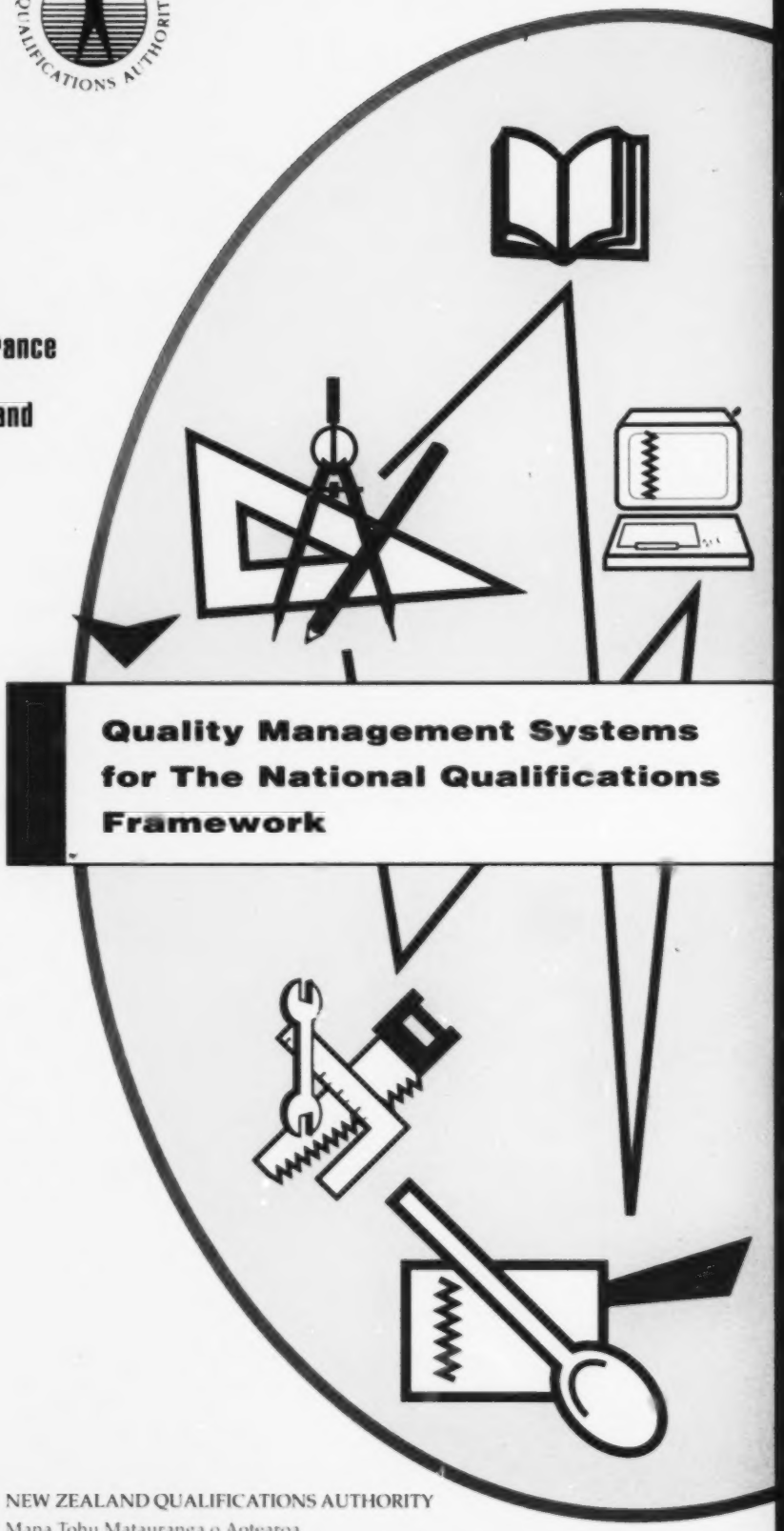
Quality Assurance in Education and Training



Quality Management Systems for The National Qualifications Framework

NEW ZEALAND QUALIFICATIONS AUTHORITY
Mana Tohu Matauranga o Aotearoa

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The New Zealand Qualifications Authority will promote improvement in the quality of education and training in New Zealand through the development and maintenance of a comprehensive, accessible and flexible National Qualifications Framework.

The Authority's main functions are to:

- co-ordinate all qualifications in post-compulsory education and training (from upper secondary to degree level) so they have a purpose and relationship to one another that the public and students can understand;
- set and regularly review standards as they relate to qualifications;
- ensure New Zealand qualifications are recognised overseas and overseas qualifications are recognised in New Zealand;
- administer national examinations, both secondary and tertiary.

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PARTNERSHIP

The Qualifications Authority recognises that integral to its operations, both internal and external, is the need to be responsive to the aspirations, needs and concerns of the Maori people. The following will therefore be taken into account when implementing the principles and processes contained in this document:

- *honouring the principles of the Treaty of Waitangi through exercising the Authority's power of government reasonably and in good faith, so that the Maori interests specified in the Treaty are actively protected;*

- *eliminating the gaps which exist in relation to the educational, personal, social, cultural and economic well-being of Maori people, and which do not result from individual or cultural preferences;*

- *providing opportunities for Maori people to develop economic activities as a sound base for realising their aspirations, to promote their self-sufficiency and to eliminate attitudes of dependency;*

- *providing for Maori language and culture to receive an equitable allocation of resources and a fair opportunity to develop, having regard to the contribution made by Maori language and culture towards the development of a unique New Zealand identity.*

Particularly important is recognition of the Treaty of Waitangi.

Responsiveness is an issue of equal importance both to the Maori people and other New Zealanders. The Qualifications Authority will operate in a way which ensures that responsiveness is part of everyday operations.

FOREWORD

The key function of the New Zealand Qualifications Authority is to co-ordinate an accessible and flexible national qualifications system that meets New Zealand's needs and conforms with internationally recognised standards.

The roles of the Authority encompass overseeing

the setting, delivery[1] and review of standards

for qualifications in secondary schools and in post-school education and training.

The Authority is publishing a series of guidelines and booklets covering the registration of private training establishments; approval of government training establishments; national standards bodies; the registration of units and qualifications; accreditation; moderation; and audit. In addition, the Authority is publishing booklets giving guidance to unit writers and to those who practise standards-based assessment. Together the guidelines and the booklets set the parameters that enable providers, teachers, industry, other user groups[2] and the Authority to work as partners jointly responsible for quality in the setting, delivery and review of standards for qualifications.

The emphasis in the Authority's guidelines and booklets is on the establishment of principles, and on partnership rather than central control. This is in keeping with recent reforms of education administration that have increased the self-management of schools and tertiary institutions and require greater responsiveness to the needs of community and user groups.

This further booklet explores the idea of quality and its management as it applies to providers of education in particular, but also as it applies to national standards bodies and to work-places offering on-job training. It shows how the concept of quality management systems underpins the guidelines. It also shows how the partnerships that are central to quality management systems enable responsibilities for quality to be devolved. It is written primarily in terms of National Certificate and National Diploma, but the principles it presents apply across all qualifications.

[1] Standards are 'delivered' through integrated activities that include teaching, assessment and moderation.

[2] 'User groups' include industry, employers and employees; providers of further education and the general community. Their interest and participation will depend on the purpose of particular qualifications.

1 WHY QUALITY?

INDUSTRY

The use of quality marks on goods is not new. They were used by the Pharaohs, by Chinese emperors, and later by silversmiths, goldsmiths and pottery manufacturers.

More recently, the military were key movers in developing quality assurance. They required suppliers of goods to implement quality systems. Because they could not test every item, they used teams of inspectors to examine the manufacturing process as a means of ensuring the outcome.

Other purchasers have followed using their own inspectors. This is very inefficient as different suppliers and manufacturers are inspected by a variety of customers, all using different examination criteria.

National and international standards have grown out of this haphazard approach and there is now an international acceptance of the importance of quality and quality management. Increasing numbers of purchasers require suppliers and providers of services to comply with such particular quality standards as those of the International Standards Organisation (ISO). Registration under an ISO standard can therefore enhance market potential.

There are other approaches to quality management, amongst which Total Quality Management (TQM) has gained wide acceptance.

EDUCATION

The history of education saw external examinations and school inspectors play key roles in assuring quality. Changes occurred as the education system became more complex. What is changing in education has also changed in much of industry and among other service providers. We now know much more about why and how quality should be achieved.

The internationalisation of qualifications has led to an expectation that

those with national responsibility for qualifications will demonstrate an unequivocal commitment to achieving quality by adopting appropriate strategies. Within New Zealand the moves towards devolved responsibility require that providers and user groups demonstrate a similar commitment.

The Authority believes that the establishment of effective quality management systems enables devolution to occur. It enables interested parties to work together towards a common purpose.

In the wider context, a focus on quality and quality management systems offers a means for improving learning opportunities and for enhancing New Zealand's reputation as a world-class provider of education and training.

2 WHAT IS QUALITY?

Before discussing quality management systems there must be an agreed understanding as to:

the features of quality, and

what these features are applied to.

In industry, quality is generally defined in relation to 'products' and 'services'. Internationally these definitions are being adapted to the education culture. It is important to appreciate that **the industry model is used as means to an end**. The Qualifications Authority does not intend a rigid application that is not wholly appropriate to the process of learning.

In the education and training context the product is:

> **the new skills and knowledge acquired by the educated or trained person**

For a person engaged in the acquisition of new skills and knowledge, the process of learning is also very significant. Therefore quality is also sought in the service that is:

> **the provision of an environment that enables the new skills and knowledge to be acquired.**

There are many definitions of quality but there is general agreement that quality is present when specified requirements are met. Because requirements rarely remain the same, future requirements also need to be anticipated and met.

If quality is the meeting of requirements, then quality can only be measured if these requirements are known and defined. By defining requirements, the standards to be achieved are set.

The following example illustrates how quality requirements can be defined in the setting, delivery and review of standards for qualifications.

EXAMPLE: A Qualification for Swimming Pool Attendants

Graduates receive a certificate at the end of a course for swimming pool attendants or as the result of a workplace assessment or similar procedure. This means that someone has verified that the graduates have acquired the skills and knowledge set out in a specification.

The specification would include a practical knowledge of rescue techniques and cardio-pulmonary resuscitation, knowledge and ability to use water treatment chemicals safely, some basic microbiology, and some skills at using pumps and valves.

The swimming pool industry will have established the specification, after identifying a particular set of skills required by swimming pool attendants. If they had carried out a thorough skills analysis, the specification would be good.

Someone will have also evaluated providers wanting to offer courses leading to the award of the certificate. This ensures that the providers have the resources and capacity to enable students to reach the specified standards.

Provision can occur in a variety of places. Where several providers offer the same course, there are checks to ensure that the various understandings of the specification are consistent. The same requirement is necessary for workplace assessments or assessments for the recognition of prior learning.

A graduate of the course or someone who has been successfully assessed can therefore be expected to have the skills and knowledge that make him or her competent to work as a swimming pool attendant.

The graduate is responsive to changing circumstances, especially as the course provided a solid understanding of the fundamental principles in the areas studied. The graduate will be able to adapt to new pool requirements and to new developments in water treatment as they come along.

New requirements will necessitate regular review of the skills and knowledge specification so that what is learned keeps pace with what is required.

The basic principles that underpin activities that were used to assure quality in the qualification for swimming pool attendants can be applied to all qualifications at all levels of the National Qualifications Framework.

Definition of Quality

In the example of the qualification for swimming pool attendants, meeting current requirements and future changes in these requirements included:

conforming to specification,

fitness for purpose, and

responsiveness.

These words provide possible definitions of quality.

Quality	***No Quality***
Quality would be found, for example, where the new skills and knowledge acquired conform with a high degree of accuracy to a well-designed specification, or where the learning environment was responsive to the different needs of all its learners.	**No quality would be found, for example, where the specification was wrong and the new skills and knowledge were incorrectly identified for their purpose, or the learning environment failed to enable the students to meet the specified standards.**

Quality depends upon who is looking. There are many requirements that need to be met before education can be considered to have quality.

It is important to note that the Qualifications Authority's responsibility lies with standards for qualifications. This responsibility shapes its perspective on quality.

3 WHAT SYSTEMS ARE NEEDED TO ASSURE QUALITY?

Quality management systems need to be in place to assure there is quality in the setting, delivery and review of standards for nationally registered qualifications.

PARTNERSHIP

For the qualification for swimming pool attendants, responsibility for quality might lie with four partners:

The **external qualifications agency** that provides external verification of the participation by and the decisions of all the other parties.

Providers offering courses leading to this particular qualification: their internal provider-wide quality structures including management, advisory committees, academic boards and the like.

Users of the new skills and other interest groups: these might be represented by recreation administrators, community officials, members of professional associations and others who meet collectively as a national standards body.

The **specialist educators:** the teachers related to this course who will be the staff within an individual provider.

Each partner needs:

- to define and meet internal and external quality requirements, and
- to interact with other partners to ensure quality in nationally registered qualifications.

Partnership arrangements will be required for all nationally registered qualifications.

THE NETWORK

To achieve partnership, the global qualifications system will comprise a network of interacting systems. This network is illustrated in the following diagram:

1 The Authority sets the parameters and supports the global system.

2 A national quality management system is developed in each area of learning by one or a combination of user groups that form a national standards body.[4]

3 Each provider or workplace has a quality management system that embraces the total organisation.

4 Teachers and work-place assessors establish a quality management system in the context of both the user group's and the organisation's quality management systems.

[4] *The term 'national standards body' is used for the groups (some of which will be Industry Training Organisations) which set the standards for qualifications and their component units, and participate in assuring quality in the delivery and review of these standards.*

COLLABORATION

In February 1992 the Authority commissioned the Heylen Research Centre to survey public perceptions of qualifications. They found that only 27% of people believe responsibility for quality should belong solely to those running the course. 44% wanted quality to be controlled by those who gain from the course such as employers and students, and 47% wanted a separate educational body.

Clearly the Authority's partnership plans meet public expectations.

Purposeful co-ordination and collaboration amongst the partners will lead to confidence in standards for nationally registered qualifications. Confidence will generate credibility.

Quality is likely to occur where overall there is interactive participation in quality management by all partners.

Quality is unlikely to occur where one partner acts unilaterally.

4 WHAT MODELS ARE THERE TO FOLLOW?

In any organisation the management of quality generally has four aspects:

1 everyone in the organisation has a responsibility for maintaining the quality of the product or service;

2 everyone in the organisation has a responsibility for enhancing the quality of the product or service;

3 everyone in the organisation understands, uses and owns quality systems; and

4 there are regular checks on the validity and viability of the quality systems.

Modern methods place importance on management roles, with the key points being:

1 Knowing the business you are in - ie what the needs and expectations of your customers are, and of the other people affected by your business.

2 Knowing your processes - ie what methods you use to achieve your business aims, how capable those methods are, how closely they match expectations.

3 Planning to meet your business objectives - ie matching your processes to your business or the reverse.

4 Empowering your staff - ie creating the conditions and opportunities for your staff to succeed, providing guidance and training.

5 Verifying that the plans are working - ie providing in-process measurement and post-process measurement, and reviewing system effectiveness.

The Authority requires that there are systems for the management of quality but has no preference as to the approach that is adopted for achieving this. A bibliography is attached which offers a number of different approaches.

Some approaches emphasise a view of quality that focuses on the procedures used to achieve aims, while others focus on the people who are to achieve the aims. Others again combine the best of both.

The following models illustrate different approaches. There will be others that are equally valid.

i ISO(NZS)9000

In 1987 the International Standards Organisation published the first five international standards on quality assurance, known as the ISO 9000 standards. The purpose of the standards is to provide confidence to management that planned quality is achieved and to provide external confidence that quality is able to be delivered.

Each standard comprises a set of elements that the applicant must include in its quality management system. For example, the elements of ISO 9002 are:

management responsibility; quality system; contract review; design control; document control; purchasing; purchaser supplied product; product identification and traceability; process control; inspection and testing; inspection, measuring and test equipment; inspection and test status; control of non-conforming product; corrective action; handling, storage, packaging and delivery; quality records; internal quality audits; training; servicing; statistical techniques.

Although the language is clearly aligned to industry, the standard can be adapted with little difficulty to suit education and training.

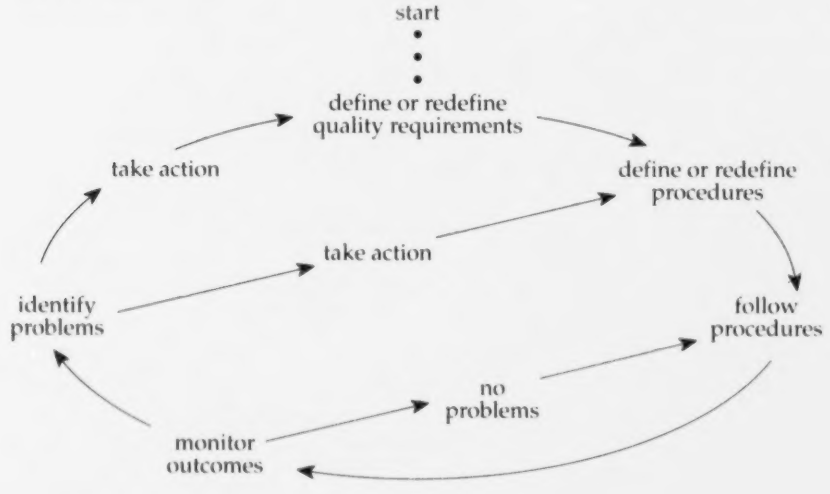
Sandwell College in England has been a leader in formally adapting this approach to suit the focus of a provider of education and training. They produced an inventory of their existing practices and then translated the ISO 9002 standard:

The Sandwell College Translation

management responsibility; quality systems; contracts with customers and clients; document control; purchasing; client admission and support; student and course records; curriculum design; development and delivery; assessment and testing of clients; consistency of assessment and testing methods; student assessment and performance records; diagnostic procedures for client failure; corrective procedures for client failure and course improvement; the physical college environment; quality records; internal quality audits; staff training; statistics.

For each element there are criteria against which an organisation can establish, document and maintain an effective quality system.

An ISO standard requires a quality system that, in its simplest sense, provides a feedback loop. Goals and targets must be defined, along with procedures to be followed to ensure that these standards are achieved. Procedures and standards are redefined where these are found to be inadequate.



In the end these standards involve applied common sense:

say what you do;

justify what you do;

do what you say;

take any necessary corrective action;

record what you do.

In New Zealand a number of bodies are accredited to offer quality system certification against the ISO(NZS)9000 series of standards. Quality system certification is one way of ensuring that an organisation has effective quality management in place. Certification indicates that the organisation's quality management procedures are documented and implemented in practice to meet customer requirements.

The ISO(NZS)9000 standards also ensure a steady improvement in quality through the progressive elimination of all sources of mistakes and errors. They do not define full TQM or Quality Improvement programmes, however.

ii TOTAL QUALITY MANAGEMENT

Total Quality Management (TQM) is a management philosophy that has as its principle understanding and meeting customer needs. This is achieved through creating the necessary conditions to enable everyone in the system to understand, control and improve their processes. It relies on gathering and analysing data to direct the effort.

Central to TQM is the concept that everyone is a supplier to someone else, not just to the end user. Quality is a continuous process that can be broken anywhere in the supplier-customer chain. By making everyone aware of how their actions help or hinder meeting requirements, quality organisations motivate their staff or suppliers to deliver quality consistently.

TQM is founded on the belief that quality begins and ends with individual effort and attitude. It proposes a rigorous, highly disciplined and skilled process designed to challenge current practice and performance. It rests on an all-pervasive training programme in an organisation.

Change is facilitated through the participation of everyone in problem solving teams. Decisions are based on factual data and problems are solved by scientific method.

TQM is a method of reducing wasted effort by involving every member of staff in the process of improvement. It is about improved commitment, communication and interaction in the pursuit of the common goal. TQM is a process for changing the organisational culture by constantly and radically reassessing an organisation's ability to meet the requirements of all its staff and customers.

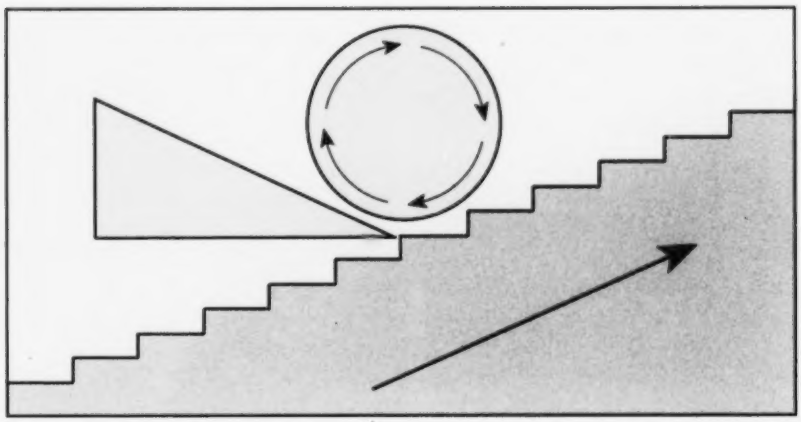
Quality processes and procedures are important features of TQM. However, their documentation is given less emphasis than is the proof of continued improvement in quality.

TQM has been practised in a number of countries but as an international philosophy has no definitive, single description. Therefore there is no single form of assessment for receiving a quality mark.

iii THE COMBINED APPROACH

Some argue that the documented procedures approach is a pre-requisite to TQM, while others contend that TQM by-passes the need for such systems.

Many see advantages in the two working together. This has been exemplified in a wedge-and-wheel model:

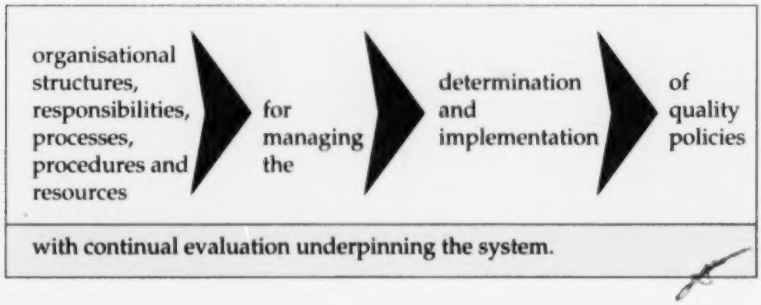


The wheel represents the management systems developed to provide all staff with opportunities to contribute to on-going improvement. This is usually carried out through participation in project teams that have short or mid-term lives.

The wedge represents the documented system that ensures that current best practice is used until the next improvement is made. The wedge could be an ISO 9000 system, or it could be standardisation of practice arising from TQM.

iv THE CORE REQUIREMENT

Whatever the approach, all partners with responsibility for quality in nationally registered qualifications need to consider the activities in which they participate and develop a quality management system that ensures there are:


organisational structures, responsibilities, processes, procedures and resources
for managing the
determination and implementation
of quality policies
with continual evaluation underpinning the system.

5 WHAT ACTIVITIES ASSURE QUALITY?

QUALITY ASSURANCE

Quality assurance is the management of previously defined quality. Quality assurance involves activities that are used to provide maximum confidence that acceptable levels of quality are achieved in all aspects of setting, delivery and review of standards.

i ESTABLISHING, MAINTAINING AND REVIEWING STANDARDS

Each of the following activities involves the Authority and/or its delegated agent or agents[5] in front-end quality assurance. Full details are provided in the guidelines series.

a Units and Qualifications

National standards bodies -

set standards for learners to achieve and

establish management standards (review, moderation, etc) for their units and qualifications.

When the Authority has confidence in these, individual units and qualifications are entered onto the Qualifications Framework.

At the outset a management standard is established for reviewing each unit or qualification. This ensures that outcomes will be evaluated and appropriate adaptations will be made.

[5] *As defined in s260 of the Education Act 1989 and its amendments*

i Unit Registration

Registration of a unit requires:

- national user group endorsement;
- unit title;
- elements (learning outcomes) and performance criteria;
- framework level and credit rating;
- revision date;
- field, sub-field, domain;*
- purpose;
- entry information;
- moderation;
- accreditation.

A unit is placed on the Qualifications Framework when the key user groups in a particular field agree that the standards are valid and at the appropriate level, and when the Authority is satisfied that the standards meet technical quality criteria.

ii Qualification Registration

Qualification registration and unit registration are similar.

A qualification consists of a coherent set of units, although the whole is greater than the sum of its parts.

Registration of a qualification requires:

* *These are terms that relate to the Authority's database for registered units. See Guide-Lines, Criteria and Regulations for the Registration of Units and Qualifications for National Certificates and National Diplomas for a full explanation.*

- national user group endorsement;
- qualification title;
- aim and rationale;
- unit combination and academic regulations;
- framework level;
- credit total;
- revision date;
- certification.

National standards bodies have systems to ensure that quality is achieved in setting, maintaining and reviewing standards. In unit and qualification registration, the external agent appraises the suitability of these arrangements and the quality of the standards themselves.

b *Providers*

Individual providers or consortia of providers establish standards for delivery.

When the Authority has confidence in these, providers or consortia are accredited to offer units and qualifications from the Framework.

A private provider first has to establish acceptable organisational and educational management standards. This enables the Authority to register it as a Private Training Establishment.

A Government Training Establishment has to acquire Ministerial approval before it can apply for accreditation.

At the outset providers also establish standards that ensure their outcomes will be internally evaluated and appropriate adaptations will be made.

Being assured that there is a capacity to deliver quality, the Authority periodically conducts Quality Audits to check.

i Accreditation

While the units on the framework will have clear statements of the standards required, it will be left to providers to create a suitable teaching programme and learning environment.

Accreditation involves an evaluation of the capacity of the provider to deliver the unit standards either singly or as a combination of units. Only an accredited provider is able to offer registered units and qualifications.

Accreditation requires a quality management system of policies and procedures that cover the following:

- the development and evaluation of teaching programmes;
- financial, administrative and physical resources;
- staff selection, appraisal and development;
- student entry;
- student guidance and support systems;
- practical and work-based components (where applicable);
- assessment;
- reporting.

with continual evaluation underpinning the system.

The Authority and/or its delegated agents ensure that key user groups make decisions about the accreditation procedures to be followed.

ii Registration of Private Training Establishments

In the private sector this is a prerequisite to accreditation. Registration ensures the provision of a sound and stable learning environment.

Registration as a private training establishment requires information on the following:

Organisational management:

- the name of the establishment;
- its legal status;
- purpose and goals;
- ownership and organisational structure;
- staffing;
- premises and equipment;
- legal status of premises;
- financial management;
- dealings with students;
- prospectus and publicity material.

Educational management:

- policies;
- quality assurance and quality control;
- evaluation.

iii Approval of Government Training Establishments

A government training establishment is one part of a Government Department or of a Crown Agency that has as its prime purpose the administration and conduct of training.

Ministerial approval of government training establishments is a prerequisite to accreditation.

Approval endorses the effectiveness of an establishment in terms of its organisational and educational management.

> **In accreditation, the registration of private training establishments and approval of government training establishments, quality assurance involves the external agent in appraising the potential of a provider. Ongoing quality is assured through evaluation and review of quality systems once they are in operation.**

c *Registered Assessors*

Individual standards bodies will establish procedures and standards (which will need first to meet the requirements of the Qualifications Authority) for the registration of assessors. Registered assessors will assess and award credit for units and qualifications in their specified area of the Framework. Such assessment will occur largely in the workplace.

ii *SELF EVALUATION*

Providers establish their own quality standards. Some of these will relate to NZQA requirements. Others may derive from the requirements of other government agencies, from external specifications such as the ISO 9002 standard, or from the philosophy of Total Quality Management.

Real and enduring quality can only come by actions of the providers themselves. The basis for these actions must be quality assurance through self-evaluation. Inspection and quality control imposed solely from outside would not work.

Self-evaluation - seeing oneself - is never easy, but without three aids it is virtually impossible.

- The first aid is training (staff development) for the task of self-evaluation.

- The second aid is a need for national and international information, such as qualitative and quantitative performance indicators as well as descriptions of best practice and innovation in teaching, learning and assessment, both general and subject specific.

- The third aid is a 'mirror', that is external assistance.

Professional associations can provide help for self-evaluation through the important ingredient of peer review. Peers should not come from education alone; those actively engaged in industry, commerce and the professions must also be involved.

Student comments and views of employers of graduates make a major contribution to maintaining and enhancing quality. Part of staff development programmes should be directed towards learning how to seek views of colleagues and students and demonstrating that local response is valuable in improving programmes and teaching.

Students need training on how best they can contribute in quality assurance activities. Indeed, all participants in quality assurance need workshops, conferences, publications, access to data-bases, etc, to gain the information and skills needed for making judgements and providing advice.

The principles of self-evaluation apply equally to all groups that participate in the Framework partnership.

iii QUALITY AUDIT

The Authority sets parameters rather than exercises control from the centre. Through accreditation providers are empowered to participate in the Framework.

Eventually, the Authority will devolve many of its responsibilities for quality management.

There is a strong rationale for this devolution. It rests on the principle that:

Quality is best ensured and enhanced when major responsibilities for its management lie directly with the professionals who are responsible for providing the learning environment.

Quality is least ensured when responsibility is 'located' externally rather than built into delivery. In these circumstances the aim of providers is often to satisfy external measures without necessarily achieving quality.

Giving major responsibilities for quality to providers means that teaching and learning are constantly evaluated and enhanced.

Devolution means that responsibility for quality lies with:

each provider's internal quality structures;

specialist educators; and

user groups.

Quality systems are put in place and are checked through audit.

> **A Quality Audit is 'a systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these are implemented effectively and are suitable to achieve objectives' (NZS 5604).**

There are several levels of audit. Internal audits should be undertaken by providers and national standards bodies as part of their quality management responsibilities.

Ultimately, for external confidence, audit by an independent third party is required.

As participants are empowered and many of the responsibilities for quality assurance are devolved, the Authority and/or its delegated agent or agents steps back and assumes an external quality audit role.

6 WILL ALL SYSTEMS BE THE SAME?

The answer is 'no'. Everywhere there will be differences in the shapes and styles of national and local systems and in the interactions between them.

There will be differences between the systems put in place by providers and those put in by work-places where on-job training occurs. Additionally, what suits big, urban polytechnics or manufacturers will not suit small, rural schools or small businesses.

There will be situations where the provider's and the teachers' quality management systems (3 and 4 - see page 10) are integrated. This would especially occur where a provider specialises in only one field.

Standards bodies will have quality management systems to ensure that the standards they develop have quality. Their systems will include continual evaluation arrangements to ensure standards remain fit for purpose. These systems will vary in style: what suits the recreation industry will not suit Maori weavers and carvers. Nor will it necessarily suit automotive engineers or historians.

As with providers, all the activities in which a standards body participates will need to be contained within a coherent quality management system. Some national standards bodies will want to participate in the accreditation process. Others will prefer to participate in the moderation process. Others again will prefer to participate in both or neither.

The Qualifications Authority and its agents will have different systems again because their function is to support the partnerships that underpin the Qualifications Framework.

Despite differences, all participants will have systems for the management of quality. There will be various ways of achieving this, but the outcome will be quality in the setting, delivery and review of standards in nationally registered qualifications.

7 HOW DO THE PARTNERS INTERACT IN QUALITY MANAGEMENT?

Moderation is an activity that can be used to illustrate an answer to this question.

THE ISSUE

Assessment needs to be fair, valid and consistent.

Any assessment includes a margin of error. Interpretations of standards will vary. The challenge is to limit the variation to acceptable proportions.

A shoal of fish has been used as a way of explaining the issue. The fish represent assessors, not learners.

> **Individual fish might be to the left or right, high or low, forward or laggard, each following its own path, each with its own motive power. Yet the shoal as a whole can veer in one direction or another. There are apparently mechanisms at work within each individual that keep it close to its neighbours.**
>
> **Through these mechanisms, deviant fish are returned to the mainstream. The relationship between individuals adjusts constantly, but the shoal remains within appropriate bounds and retains a constant, steady progression. Some variations are considered acceptable.[7]**

[7] *This illustration does not imply that learners should not be encouraged to excel through achievement beyond expectation.*

Moderation is a broad label that covers activities that help to ensure there is uniform interpretation and application of standards.

Moderation ensures that assessors remain within the national shoal.

THE PROCESS

As part of their quality management system, teachers employed by an accredited provider will be obliged to have assessment policies and procedures that assure consistency with agreed standards. This requires that they carry out internal moderation.

They will also participate in any external moderation arrangements prescribed for the units they are accredited to offer.

Such external requirements are set by individual standards bodies. As part of its application for registration of units, a standards body will submit an external moderation proposal to the Qualifications Authority.

Standards bodies will have two external moderation options:

- either a centrally established and directed national system;
- or a national system of local moderation networks.

The Authority may play a key role in the development and implementation of central moderation systems. Alternatively, such systems may be designed and operated by professional associations or national industry organisations.

Local networks will normally be established by groups of providers, although there may be links to the relevant professional association or industry.

Any external moderation system, whether it is centrally or locally

designed, is likely to involve teachers in interaction with peers from other providers.

The standards body and/or representatives of user groups may choose to play an active role in moderation activities.

A provider's quality management system ensures the accuracy of information provided to the Authority on credit achievements.

Through Quality Audits the Authority and/or its delegated agents will ensure that both accredited providers and moderation systems meet their obligations.

8 WILL ALL PROVIDERS TAKE THE SAME ROUTE?

Again the answer is 'no'.

Accreditation can be handled in different ways depending upon the capacity of a provider to demonstrate that it has comprehensive quality systems in place.

1 UNIT ACCREDITATION

The first and fundamental category of accreditation is *unit accreditation*. This involves an evaluation of the capacity of a provider to deliver the standards contained within a single unit.

2 ACCREDITATION FOR A COMBINATION OF UNITS

The second category of accreditation is similar and involves an evaluation of the capacity of a provider to deliver the standards contained within a number of named units. This could include accreditation for a full qualification.

3 GROUP ACCREDITATION

Group accreditation is an evaluation of a provider's ability to deliver the standards contained within all units included within a field, sub-field or domain of the National Qualifications Framework database of registered units. This would also include accreditation for units that *will be registered within that part of the database in the future*. The accreditation process will, therefore, also focus on the applicant's ability to implement policies and procedures that will ensure the quality of delivery in new units being developed.

4 GENERAL ACCREDITATION

The final category of accreditation is a general provider accreditation. It recognises a provider's capacity to deliver all National Certificate and National Diploma units within the Framework. To make an application for General Accreditation a provider would document its quality management system. An evaluation of the system would focus on:

a Overview of the Quality Management System

- quality policies, including policies on:

  compliance with the National Qualifications Framework;

  interactions with National Standards Bodies.

- organisational structures, responsibilities, procedures, processes, resources.

b Coverage of the Quality Management System

i Programme design and development

- identification and prioritisation of the need for new or revised programmes or components of programmes;
- identification of and meeting the changing needs of learners;
- development of programmes;
- internal approval;

ii Programme provision

- collection and use of data on provision;

- assurance that provision is free of gender and cultural bias;
- evaluation and review of programmes.

iii ***Resources***

- financial, administrative and physical resources;
- identification of and meeting resource requirements;
- learning support services;

iv ***Teaching and other specialist staff***

- staff selection and appraisal;
- professional development and support;
- participation in professional associations;
- research and consultancy.

v ***Learners***

- provision of learning and contractual information;
- recognition of prior learning and credit transfer;
- entry, induction and support;

- monitoring learner performance, and remediation and counselling services;

- appeals against exclusion from courses, assessment decisions and breaches of contract.

vi ***Teaching and learning***

- evaluation of teacher effectiveness;

- collection and use of data on teaching and learning;

- catering for individuals with different learning styles;

- experimentation with and introduction of improved teaching and learning techniques.

vii ***Assessment***

- development of assessment instruments;

- formative and summative assessment and re-assessment procedures;

- verification of assessment results;

- reporting on learner achievements;

- recording, certificating and archiving learner achievements by unit and by qualification.

- external assessment and external moderation;

- participation of students, industry and other user groups, professional associations, government agencies and the community, with appropriate gender and ethnic representation.

Where an evaluation finds user-group endorsement over all fields of the framework; shows that the applicant has robust systems, that all key user groups support and participate in them; and that they feature sound quality assurance practices: the Authority and/or its delegated agents may grant General Accreditation. The Authority and/or its delegated agent will subsequently maintain a Quality Audit role.

At this point, however, the participation of user groups continues.

If a quality audit later reveals that the local system has weakened, and there is no evidence of a strategy to improve the situation, the General Accreditation would be withdrawn, after a suitable period of notice within which the provider may correct deficiencies.

9 WHAT ARE THE GOALS?

The concept of quality management systems offers a new approach to responsibilities for the setting, delivery and review of standards for qualifications. The goals of this approach are:

- to identify and promote understanding of the characteristics of quality;
- to establish systems for maintaining and enhancing quality;
- to devolve responsibilities for quality;
- to achieve quality through partnership;
- to accommodate diversity;
- to provide confidence that acceptable levels of quality will always be achieved;
- to enhance New Zealand's reputation as a world-class provider of education and training.

APPENDIX 1

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APPENDIX 2

GLOSSARY

- **Accreditation** (of providers) - a process for ensuring that providers have the capacity, including management of quality, to deliver unit standards.
- **Assessment** - a process of collecting and interpreting evidence of competence or achievement.
  - ***Moderation of assessment*** *- a process for ensuring the consistency of assessment with the required standard.*
  - ***Performance criteria*** *- statements of competence or achievement against which the attainment of outcomes is measured.*
  - ***Standards-based assessment*** *- assessment which is measured against unit standards.*
- **Certification** - documentary evidence that a qualification has been awarded.
- **Credit** (as applied to a unit standard) - a value assigned to a unit standard which reflects the relative time and effort required to complete its outcomes.
- **Credit Transfer** - a process of transferring credits between courses which lead to a nationally registered qualification.
- **Database of Student Records** - a database which contains details of units and qualifications completed by individuals.
- **Delivery** - teaching and learning approaches, context and content, resources, and range and number of assessments.
- **Domain** - a term describing a specific area of education or training at unit level, defined in the *NZQA Standard Classification for Units and Qualifications*
- **Element/Outcome** - the competencies/achievements which must be demonstrated for successful completion of a unit.
- **Field** - a term describing a general area of education or training, corresponding to an *ISCED* field and defined in the *NZQA Standard Classification for Units and Qualifications* (see also **Sub-field** and **Domain**)
  - ***Sub-field*** *- a term describing a specific area of education or training at qualification level, corresponding to an ISCED sub-field and defined in the NZQA Standard Classification for Units and Qualifications*
  - ***Domain*** *- a term describing a specific area of education or training at unit level, defined in the NZQA Standard Classification for Units and Qualifications*

- **General Accreditation** - accreditation of a provider to offer all National Certificate and National Diploma units up to level 7 of the Framework.

- **Group Accreditation** - accreditation of a provider to offer a number of units in a specified field, sub-field or domain up to a specified level.

- **Levels** - the eight levels of the Framework are defined in terms of progressive stages of competence/achievement and complexity in units assigned to them.

- **Moderation of Assessment** - a process for ensuring the consistency of assessment with the required standard.

- **National Qualifications Framework** - collectively, all nationally registered qualifications and the nationally registered unit standards from which they are derived. Implicit is a defined and logical relationship between them.

- **National Standards Bodies** - represent all major user groups connected with a field, sub-field or domain (for example, health sciences) and have responsibility for the development, evaluation and endorsement of all units and qualifications in that category.

- **NZQA Standard Classification for Units and Qualifications** - a document which defines fields, sub-fields and domains, used for naming qualifications and unit standards, and for assistance in defining NSB and ITO fields, sub-fields or domains.

- **Outcome/Element** - the competencies/achievements which must be demonstrated for successful completion of a unit.

- **Performance Criteria** - statements against which the attainment of elements/outcomes is measured.

- **Provider** - an individual or organisation providing education or training.

- **Qualification** - a combination of unit standards which, when certificated, completes the *educational* prerequisite agreed by national standards bodies to be appropriate for entry to an occupation, or to a course at a higher level.

- **Quality Audit** - a process for ensuring the effective performance of a provider's overall systems for the management of quality; a function of the Authority.

- **Quality Management** - a process and structure implemented by a provider for ensuring that standards required by the Authority and national standards bodies are met; a prerequisite for accreditation.

    - ***Accreditation** (of providers) - a process for ensuring that providers have the capacity, including management of quality, to deliver unit standards.*

        - ***Group Accreditation** - accreditation of a provider to offer any number of units in a specified field, sub-field or domain up to a specified level.*

- *General Accreditation - accreditation of a provider to offer all National Certificate and National Diploma units up to level 7 of the framework.*
- *Unit Accreditation - accreditation of a provider to offer a specific unit or units.*

- *Course Approval (1992 only) - a process for ensuring that the outcomes and assessment standards of a nationally recognised course outside the Framework conform with Authority criteria.*
- *Moderation of Assessment - a process for ensuring the consistency of assessment with the required standard.*
- *Registration of Private Training Establishments - a process for ensuring that basic educational and consumer safeguards are in place.*
- *Registration of Units and Qualifications - a process for ensuring that units and qualifications have been evaluated and endorsed by national standards bodies as representing an exclusive national standard, and so registered with the Authority.*

- **Recognition of Prior Learning** - a process of awarding credits for outcomes which have not been certificated in terms of the National Qualifications Framework and may have been completed outside formal education and training.
  - *Credit Transfer - a process of transferring credits between courses which lead to a nationally registered qualification.*
- **Registration of Private Training Establishments** - a process for ensuring that basic educational and consumer safeguards are in place.
- **Registration of Units and Qualifications** - a process for ensuring that units and qualifications have been evaluated and endorsed by national standards bodies as representing an exclusive national standard, and so registered with the Authority.
- **Standards** - nationally registered statements of education and training outcomes and their associated performance criteria. See also Unit.
- **Standards-based Assessment** - assessment which is measured against unit standards.
- **Sub-field** - a term describing a specific area of education or training at qualification level, corresponding to an ISCED sub-field and defined in the NZQA Standard Classification for Units and Qualifications
- **Unit** - a unit has two parts:
  - *nationally evaluated and endorsed unit standards registered on the Authority's unit standard database*
  - *delivery details developed by a provider for teaching purposes.*

- ***Delivery*** *- teaching and learning approaches, context and content, resources, and range and number of assessments.*
- ***Element/Outcome*** *- the competencies/achievements which must be demonstrated for successful completion of a unit.*
- ***Unit Standards*** *- nationally registered element/outcome statements and performance criteria, and administrative information.*

- **Unit Accreditation** - accreditation of a provider to offer a specific unit or units.
- **Unit Standards** - nationally registered element/outcome statements and performance criteria, and administrative information.
- **User Group** - all those who derive direct or indirect benefit from a qualification and its component units; generally includes students, qualified individuals, professional associations and employers who may be represented, along with providers, in a national standards body.

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